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AGRICULTURAL MEMORANDUM NO 586a

Evaporation from bare soil in April - H A Douglas

Equation for heavy soils in Ag.Mem.586 is in error; a better fit is given by

$$\frac{E}{PE} = 0.908 + 0.256\,\frac{R}{PE} - 0.02D$$

This gives a mean error of about 3 mm and a multiple correlation of 0.91.
It is probably sufficient to use $\frac{E}{PE} = 0.9 + 0.25\,\frac{R}{PE} - 0.02D$

Amended Data (in millimetres).

				Light Soils		Heavy Soils	
YEAR	PE	R	D	E	estimate	E	estimate
1939	69	46.7	20	39.0	40	45.5	47
1940	61	28.7	25	29.5	26	37.4	32
1941	62	29.4	27	22.9	23	28.4	30
1942	81	22.0	25	27.5	31	33.2	39
1943	84	20.5	27	28.3	28	36.0	36
1944	65	55.4	25	27.1	32	35.3	41
1945	69	32.9	22	36.6	35	42.2	41
1946	70	31.1	28	24.5	25	34.0	32
1947	67	44.2	22	33.6	29	41.1	43
1948	73	50.9	23	36.1	38	46.1	46
1949	78	46.5	24	32.0	37	38.9	45
1950	69	54.3	22	39.6	39	45.4	46
1951	75	56.0	21	37.9	43	45.7	51
1952	72	21.7	27	29.0	25	37.1	32
1953	70	53.9	22	31.8	39	38.6	47
1954	65	8.5	29	15.0	18	22.0	24
1955	67	27.3	24	30.1	30	35.6	36
1956	69	36.4	25	29.8	30	38.3	37
1957	67	5.0	30	11.9	16	18.5	22
1958	70	11.7	28	22.4	21	29.2	27
1959	72	58.1	23	37.9	39	47.3	47
1960	69	14.8	28	25.1	22	31.8	28
1961	59	75.8	19	39.1	42	48.9	51
1962	67	55.9	23	37.4	37	46.7	44
1963	61	47.2	20	39.1	37	47.0	43
1964	59	46.7	21	37.4	34	45.3	41
1965	67	40.0	24	36.9	32	44.8	39
1966	58	68.6	19	44.0	41	50.9	48
1967	64	44.6	24	38.6	32	48.6	39
1968	77	38.0	22	36.6	39	44.7	46

Any comments or suggestions on this paper should be referred to the author.

Meteorological Office
Bracknell

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